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Assessment of Solubility and Intestinal Absorption *In Vitro* of Praziquantel in Solid Dispersions of Polyethylene Glycol 6000

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***SUMMARY*. The aim of this study was to investigate the impact of solid dispersions of polyethylene glycol 6000 (PEG 6000), using the co-precipitation method, on the *in vitro* solubility and intestinal absorption of praziquantel (PZQ). The solubility of PZQ in solid dispersions and physical mixtures was assessed in purified water and TC-199 buffer. The everted intestinal sac model was employed to assess, *in vitro,* intestinal absorption of PZQ. A significant enhancement in both *in vitro* solubility and intestinal absorption of PZQ was found in solid dispersions compared to pure PZQ and physical mixtures. This positive series of preliminary results showed that solid dispersion of PEG 6000 is a valuable strategy for increasing bioavailability of PZQ and could also prove useful for other poorly water-soluble drugs.**

KEY WORDS: Intestinal absorption, Polyethilene glicol 6000, Praziquantel solubility, Solid dispersion.

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